

ABSTRACT

A layer 2 switch network system includes a Radius server that notifies an edge switch of a temporary MAC address allocated to a terminal, and the edge switch that

5 acquires the temporary MAC address from the Radius server, that stores therein swap data for associating the acquired temporary MAC address with a real MAC address, that converts the real MAC address of a source set in a MAC frame to the temporary MAC address of the source when the

10 edge switch receives the MAC frame from the terminal, and that converts the temporary MAC address of a destination set in the MAC frame to the real MAC address of the destination when the edge switch transmits the MAC frame to the terminal, and enables safe and simple use of the

15 temporary MAC address.